

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-83

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

CUMMINS ENGINE COMPANY, INC.

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That the following Cummins Engine Company, Inc. 1993 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

Fuel Type: Diesel

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
PCE0359FAA6 (403A)	5.9 (359)	Smoke Puff Limiter Turbocharger Charge Air Cooler
PCE0359FAB7 (403B)	5.9 (359)	Smoke Puff Limiter Turbocharger Charge Air Cooler
PCE0359FAC8 (403C)	5.9 (359)	Smoke Puff Limiter Turbocharger Charge Air Cooler

Engine models and codes are listed on attachments.

The certification emission standards for these engine families in grams per brake-horsepower-hour are as follows:

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.5	5.0	0.25

The certification emission values for these engine families in grams per brake-horsepower-hour are as follows:

<u>Engine Family</u>	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
PCE0359FAA6 (403A)	0.3	1.1	4.9	0.25

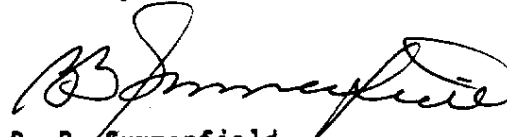
<u>Engine Family</u>	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
PCE0359FAB7 (403B)	0.2	1.0	4.2	0.20
PCE0359FAC8 (403C)	0.3	2.1	4.9	0.23

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.)

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 22nd day of September, 1992.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family 403A PCE0359FAA6

Liter (CID) 5.9 (855) Fuel Type Diesel Engine Config. I-6

Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) SPL (TC, CAC)
(Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm ³ /stroke (lbs/hr)	Fuel Pump & Injector(I) P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
B5.9-160 (1579)	160 @ 2500	74 (62.3)	(1)3918965 3913442 3918964 3918991 3918992 3919712 3919713 3919714 3919715 3923346 3923347 3923348 3923349	NA	NA
B5.9-160 (1351)	160 @ 2500	74 (62.3)	(1)SAME SAME	NA	NA

Revisions:

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family 403B PCE0359FAB7

Liter (CID) 5.9 (359) Fuel Type Diesel Engine Config. I-6

Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) SPL (TC, CAC)
(Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm ³ /stroke (lbs/hr)	Fuel Pump & Injector(1) P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
B5.9-230 (0987)	230 @ 2500	104 (88)	(1)3919091 3913440 3921769	NA	NA
B5.9-210 (1422)	210 @ 2500	96 (81)	(1)3919091 3918321 3921776	NA	NA
B5.9-190 (1261)	190 @ 2500	89 (75)	(1)3919092 3919090 3921777	NA	NA
B5.9-190 (1582)	190 @ 2500	89 (75)	(1)3919092 3919090 3921777	NA	NA

Revisions:

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family 403C PCE0359FAC8

Liter (CID) 5.9 (359) Fuel Type Diesel Engine Config. I-6

Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) SPL (TC, CAC)
(Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP $\text{mm}^3/\text{stroke}$ (lbs/hr)	Fuel Pump & Injector(1) P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
B5.9-175 (1527)	175 @ 2500	81 (68)	(1)3919092 3921837	NA	NA

Revisions: